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AUTHOR Woolbright, Meg
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ABSTRACT

In 1991, as an experiment, the Director of the Writing Center at Siena College (a comprehensive college with a Franciscan tradition, located in a suburb of Albany, New York), agreed to team-teach a "Scientific Writing" course with a colleague who is a biologist. As they worked together, it appeared that for the biologist, knowledge was something outside of, and separate from, the knower, while for the writing teacher, knowledge and writing are socially mediated and socially constructed. The focus of negotiations between the two teachers during the first year was on pedagogy. The one-semester course was changed from meeting one hour per week to two hours--the second hour designed as a writing workshop staffed by upper-level biology students. One of the problems encountered was that many of the students did not understand the science they were asked to write about. Talk among the teachers and tutors during the second year was not of pedagogy but of understanding the effects of pedagogy on science, on language, and on knowledge. Based on relationships established in the first year, the writing teacher, the biology teacher, and the tutors began to talk about their differences, particularly differences in rhetoric. (RS)

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Scientific Writing: Tales From the Dark Side?

Meg Woolbright

Spring, 1992

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In Philosophy and the Mirror of Nature, Richard Rorty distinguishes between epistemology and hermeneutics. With epistemology, he says, comes the claim of accurate representation, of foundations of knowledge, and of the desire for confrontation and constraint. With hermeneutics, comes conversation. My purpose here is to talk to you about a conversation I've been having for the last two years with our Biology Department. The subject of the conversation is a course called "Scientific Writing."

I'm the Director of the Writing Center at Siena College, a comprehensive college with a Franciscan tradition, located in a suburb of Albany, NY. Although much current scholarship is addressing what Susan McLeod calls "the second stage," of WAC, at Siena, we do not have a formal WAC program. What we do have is a Writing Center and faculty from across the college interested in improving student writing. Our Biology department is perhaps the most visible in their efforts. In 1976, they began offering "Scientific Writing," a one-hour a week, semester-long course required of all 400 majors.

CS213277

Last year, I agreed to team-teach the class with a Biologist. My colleagues' motivation was to learn ways to improve her students' writing; my motivation was to learn as much as I could

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about how this scientific discipline constructed itself and to start what I hoped would be an on-going conversation with the department. Acutely aware of the political precariousness of my situation, I assumed the role of a guest--a guest who wanted to be invited back. As both Greg Myers and Alan Gross remind us, knowledge and respect are crucial in this sort of cross-disciplinary work. My colleague and I had the respect, but what neither of us had was much knowledge of the other. As we planned and taught the course, it became obvious that we claimed membership in very different communities, communities in which different views of knowledge, language, and teaching are authorized. After briefly mentioning our differences, I'll talk of our negotiations for the last two years.

For my colleague, knowledge is perhaps best defined by Rorty's mirror image: knowledge is something outside of, and separate from the knower. It is objective, measureable and testable through experimentation. For her, writing is a cognitive, solitary act, the result of which is scientific rhetoric, a rhetoric which does, for the most part, privilege the object. When we began working together, she saw little connection between science and language, little connection between the knower and the known. In her teaching, she was--and to some extent still is--most comfortable with lecturing. Throughout, her concern is with "coverage:" covering the sections of a scientific paper, covering graphs, tables, and titles, covering the principles of clear prose.

As a writing teacher, my views and the views of the community to which I belong, are somewhat different. For me, knowledge and writing are more lenses than they are mirrors--socially mediated and socially constructed. They are "located" in the interplay between the knower and the known. Teaching is conversation.

The focus of our negotiations the first year was pedagogy. In other words, I was a good guest: I came bearing gifts. For the most part, these negotiations went well. We increased the number of hours a week that the class met from one hour to two; we designed the second hour as a writing workshop, and we trained upper-level Bio majors to lead the workshops. We asked for multiple revisions. Very often, we began or ended the workshops with expressive writing, asking students to identify questions they had or to struggle with a particularly difficult section of the paper. At the beginning of the semester, my colleague said that she felt guilty about not doing enough "work" in the class, and although she thought that talking to students about their writing was fun, she wondered when we would get to the real writing--the GRAMMAR. By the end of the semester, however, she was more accepting--up to a point.

Alan Gross says that one of the myths of scientific writing is that following proper procedures will lead to reliable knowledge. This seems right. My colleague believed that if we followed these writing "procedures", we would arrive at something called "writing knowledge." Once students had this knowledge, they would be able

to write. As long as these "procedures" stayed in the realm of writing pedagogy, and stayed in the second hour of the week, she was willing to accept them. What she was less willing to accept was that language and scientific knowledge were in any way connected. One of the problems we encountered was that many of our students did not understand the science we were asking them to write about. Our negotiations here did not go well.

I'm sure you can imagine the prose we got, the result of the students not understanding the science and of attempting--instead of understanding, which they saw as an impossible task--to imitate a discourse that was by and large foreign to them. As I struggled to complete the assignments, I did the same--instead of writing to understand the material (which I saw as if not impossible, at least distasteful), I wrote to imitate "scientific style." I tried, as Britton says, "to limp along." It didn't work. Because my voice was excluded, I tried to chose another. I became Sondra Perl's unskilled writer: I wrote in tiny circles, never progressing more than two or three words before going back to cross out and begin again, asking myself, "Does this SOUND right?" I wanted nothing more than to get the writing over with. I hated it.

The dishonesty of this bothered me more than anything else. We taught our students the etiquette of scientific writing, but not the substance. Confronting this changed the tenor of our conversations.

This year, in what are becoming traditional beginning and end of the semester meetings with teachers and tutors, we do not talk of pedagogy but of understanding the effects of pedagogy on science, on language and on knowledge. My gifts now come with a price. We foreground the interplay between the knower and the known: We write together in dialectical notebooks, listing questions we have about the science. We do expressive writing, trying to explain to ourselves what it is we want to say. We write sections of the scientific paper, keeping notes on the process we engage in. We talk about how we write these, examining not only various options of style and organization but the assumptions of the writer and the effects on the reader. We have just recently begun to talk of our differences, particularly differences in rhetoric. We can have these conversations now, because in some sense, I am one of them. Having established a relationship with the department and having learned what I could about the discipline of science the first year, I have earned the authority and trust to continue this relationship.

In "Writing Utopias" Dan Mahala says that we need to move from "teachers demands for methods that work" to "interrogating prevailing attitudes about knowledge, language, and learning" (773). Although I agree that we need to move beyond method and begin to look at our differences with other disciplines, I disagree that I ought to assume the role of "interrogator." For Rorty, the goal of hermeneutics is not to replace one epistemology with another but to keep the conversation going. In Consequence of

Pragmatism, he says, "in the end, what matters is our loyalty to other human beings clinging together against the dark, not our hope of getting things right" (166). Working with colleagues in other disciplines is not converting the natives, and talking about scientific writing is not telling tales from the dark side.

Works Cited

Gross, Alan G. "Does Rhetoric of Science Matter? The Case of the Floppy-Eared Rabbits." CE 53 (1991): 933-44.

Mahala, Daniel. "Writing Utopias: Writing Across the Curriculum and the Promise of Reform." CE 53 (1992): 773-89.

McLeod, Susan. "Writing Across the Curriculum: The Second Stage and Beyond." CCC 40 (1989): 337-43.

Rorty, Richard. Consequences of Pragmatism. Minneapolis: U of Minnesota P, 1982.

_____. Philosophy and the Mirror of Nature. Princeton: Princeton UP, 1979.